

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

REDACTED VERSION

Date: Wednesday, July 16, 2008

From: Roberto Bernier

To: Debbie Dietrich, Office of Emergency Management
Ragan Broyles, Superfund Division

Subject: POLREP 5 of 5

Clute Texas Mercury Response

(b) (6) Clute, TX

Latitude: (b) (6)

Longitude: (b) (6)

POLREP No.:	5	Site #:	A6H7
Reporting Period:		D.O. #:	11
Start Date:	7/3/2008	Response Authority:	CERCLA
Mob Date:	7/3/2008	Response Type:	Emergency
Demob Date:		NPL Status:	
Completion Date:	10/31/2008	Incident Category:	Removal Action
CERCLIS ID #:		Contract #	EP-S6-07-02
RCRIS ID #:			

Site Description

On June 28, 2008, local authorities reported to the National Response Center (NRC No. 875602) that 3 private residences had been contaminated with approximately 6 pounds of mercury. A child found the mercury contained in a jar and played with it at his residence. Some of the mercury was transferred to two additional properties by neighbor kids that also handled the mercury. On June 19, 2008, local emergency response teams responded to 2 of the houses, removed elemental mercury and contaminated items and declared them remediated. The local teams responded to the source-house and removed the remaining mercury, a section of carpet from the front bedroom, and some soil at the house front yard; however, operations were suspended due to lack of funding. On July 3, 2008, EPA mobilized its Superfund Technical Assistance and Response Team (START-3) contractors to the incident location to assess the situation and perform analytical screening of the source-house for mercury vapors. The residence was secured by the local authorities and the occupants of the house were relocated with relatives.

Current Activities

On 14 July 2008, EPA continued procedures to screen and decontaminate personal effects, to screen inside the house to locate mercury hot spots, and to cleanup the mercury spill. After measuring high reading of mercury, a section of sheetrock below a window was removed from Bedroom 1. The aforementioned area was then cleaned with HgX and vacuumed with a mercury removing vacuum cleaner (merc-vac'd). The wood floor of the seams along the baseboards and floor of Bedroom 1 were sealed with caulk. The floor and baseboards were painted with primer and sealed with epoxy paint. HgX solution was applied to the Living Room and Hallway, merc-vac'd, and painted with primer. HgX solution was applied to the Kitchen, Laundry Room, Dining Room, and Den floors and merc-vac'd. HgX was applied to the washing machine drain line. Also, Bedroom 2 was closed and screened. The concentration of mercury vapor at a height of four-feet was below the EPA action level. Personal effects exhibiting elevated levels of mercury vapor were removed from Bedroom 2 for additional screening and decontamination. The concentration of mercury vapor in the Bathroom (at a height of four-feet) was above the EPA cleanup standard. Personal effects were removed for screening and decontamination. The front of the house was closed for screening to occur the following day. Waste samples are collected daily from disposed materials for TCLP analysis.

On 15 July 2008, EPA continued procedures to screen and decontaminate personal effects, to screen inside the house, to locate mercury hot spots, and to cleanup the mercury spill. After the initial morning screening, Bedroom 1, Living Room, Hallway, Bedroom 2, Bathroom, and the Kitchen, Laundry Room, Dining Room, and Den exhibited mercury vapors below the EPA cleanup standard. Following screening, the Living Room and Hallway floors were coated with epoxy paint and the seams were caulked. The poly covering the front porch was removed and the potted plants and planters were moved from position in order to apply HgX solution. During the process, a substantial amount of elemental mercury was discovered

in the outside area where the potted plants and planters were located, mostly in the soil area next to the concrete porch. The additional mercury, in combination with a pressure inversion, significantly elevated the concentrations of mercury vapor inside Bedroom 1, Living Room, and Hallway to levels greater than the EPA cleanup standard. A layer of poly was added to a portion of the front of the house to minimize vapor migration into the house while working on the in the newly discovered mercury source. In the back portion of the house, the wood floor of the den was coated with epoxy paint and the seams were caulked. That area, which was isolated early during the response from the front of the house, continues to show mercury levels below the EPA cleanup standards

Planned Removal Actions

Continue the removal of the mercury, in specific, the area outside the house by the porch. Continue heating and venting.

Next Steps

Complete the screening of personal effects. Continue to isolate areas of elevated mercury vapor concentration in order to remove elemental mercury and remediate the residence. Continue indoor screening and venting. Remove elemental mercury from front porch area. Remediate mercury-affected soil that is potentially affecting the levels inside the property. Apply Mercon-X gel to plumbing to further reduce mercury vapor concentration.

Key Issues

Continue to maintain best management practices to prevent cross-contamination of mercury into areas of lesser mercury vapor concentration.
Continue monitoring for heat stress, a significant health and safety factor at this site.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	\$0.00	\$0.00	\$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.